

Enabling Customer-Driven Supply Chains Through Blockchain

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VP Italy Roundtable

Panel Question #1

A recent survey revealed that over 90% of corporate supply chain and procurement practitioners are totally unaware of the term “blockchain”. This result represents...

1. A very significant problem because **blockchain is the future**
2. A potential problem but **not something that keeps me awake at night**
3. Not a problem because I work in **another department**
4. Not a problem because I have **other priorities** than blockchain
5. Not a problem because in my company we are **fully aware** of blockchain

How Does It Work?

- Quick explanation of blockchain's working principles.
- View Discretion: the images that follow may disturb blockchain "purists".
(but well serve the purpose for supply chain practitioners)

Actors, Documents & Events

Flow of goods from **Exporter** Malay Grower (Malaysia) to **Importer** Berlin's Fresh Cuts



Malay Grower



Berlin's Fresh Cuts

Registers 3 documents
on the private shared ledger



Letter of Credit



Bill of Lading



Phyto-sanitary
Certificate

Events



Letter of Credit
issuance

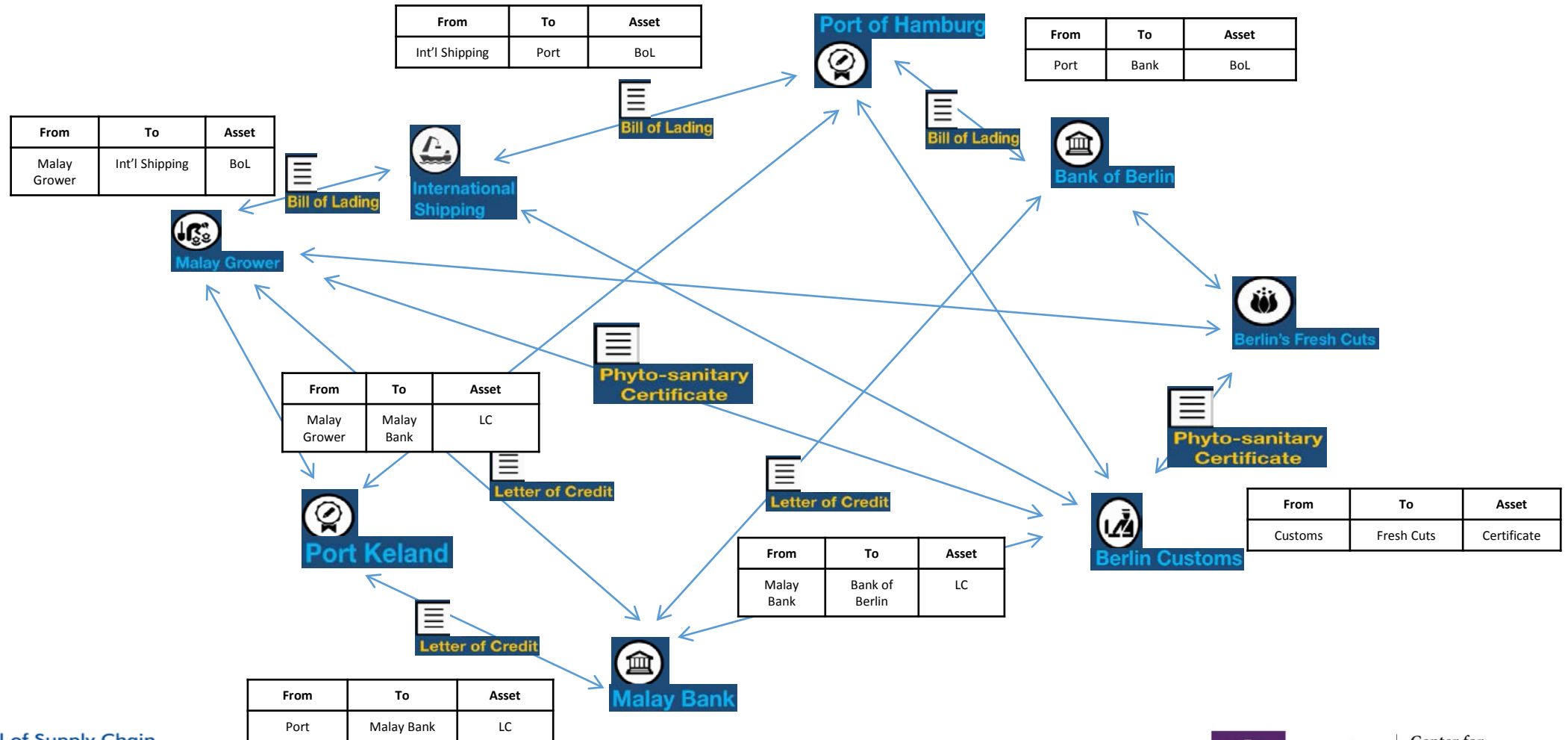


Shipping & Inspection
Progress



Money Transfer

Blockchain Allows Peer-to-Peer SC Collaboration



Panel Question #2

Which impediment to supply chain collaboration should be removed **first**?

- a. Parties have separate systems
- b. Parties want to keep privacy of data
- c. Missing standards
- d. Nobody wants to be the first mover

Panel Question #2a

Which impediment to supply chain collaboration should be removed **second**?

- a. Parties have separate systems
- b. Parties want to keep privacy of data
- c. Missing standards
- d. Nobody wants to be the first mover

Blockchain Authentication Nodes



International Shipping



Bank of Berlin



Port of Hamburg



Port Kelang

Blockchain Ledger Participants



Shipping Company: International Shipping



Exporter: Malay Grower



Importer: Berlin's Fresh Cuts



Port Authorities: Port of Hamburg, Port Keland

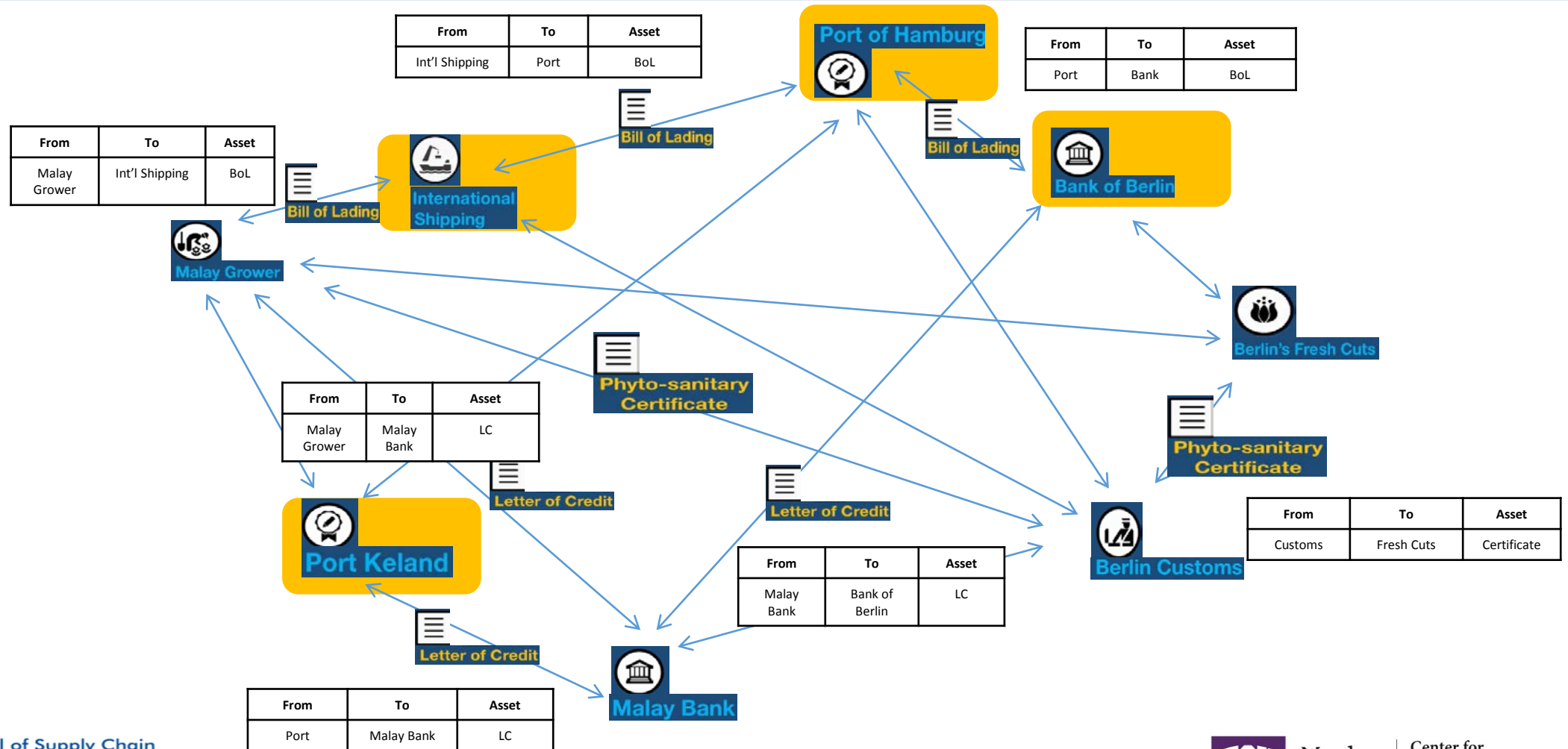


Customs Authority: Berlin Customs



Importer's & Export's Banks: Bank of Berlin, Malay Bank

Blockchain Authentication Nodes and Participants



Automatically validated by:

- ✓ International Shipping
- ✓ Berlin Bank
- ✓ Port Kelang
- ✓ Port of Hamburg
- ✓ Consensus

Malay Bank

Malay G

Port of Hamburg

Berlin Customs

Berlin's Fresh Cuts

Berlin Bank



International Shipping

BLOCKCHAIN SHARED LEDGER

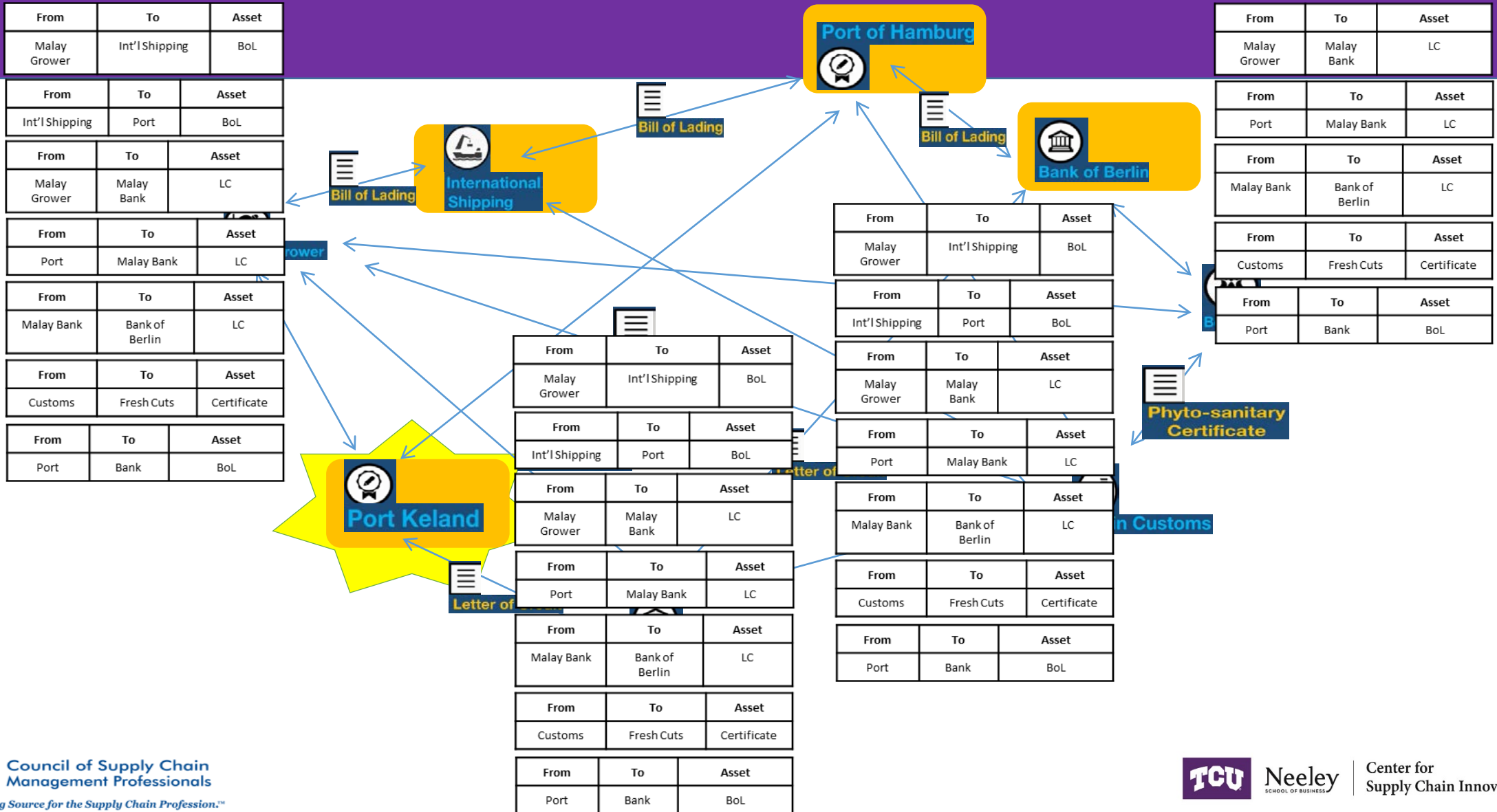


Phytosanitary Certificate

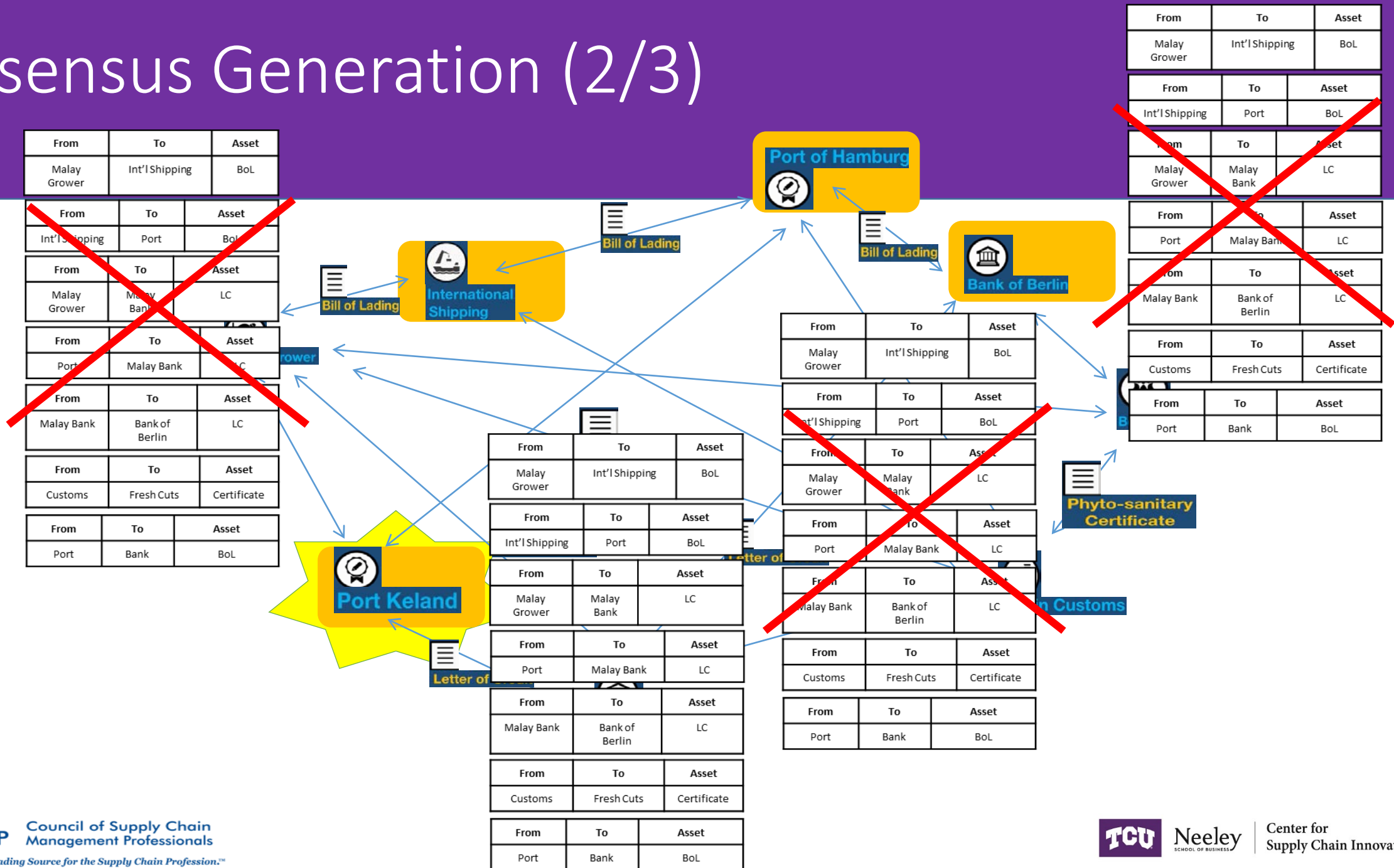


Bill of Lading

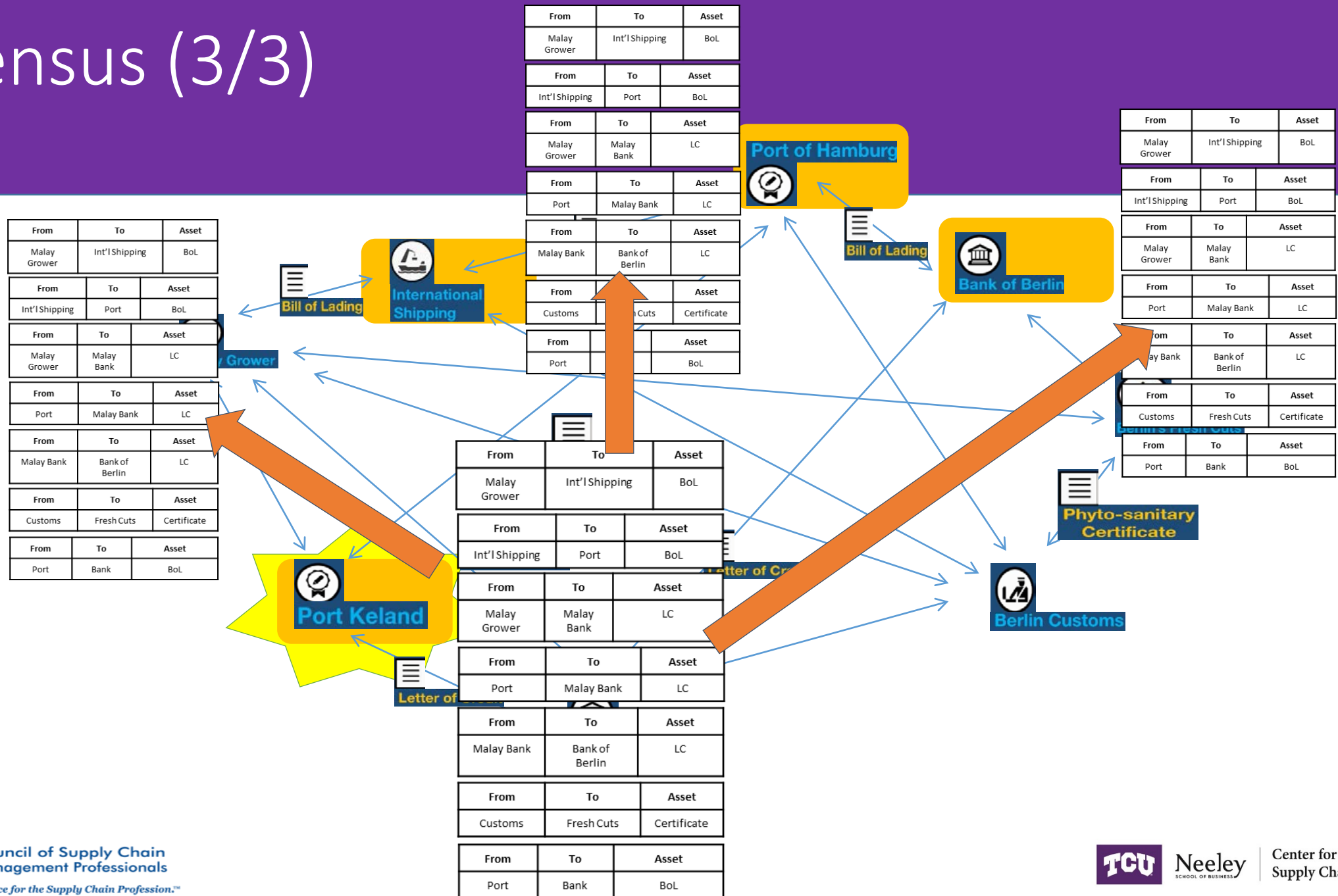
Consensus Generation (2/3)



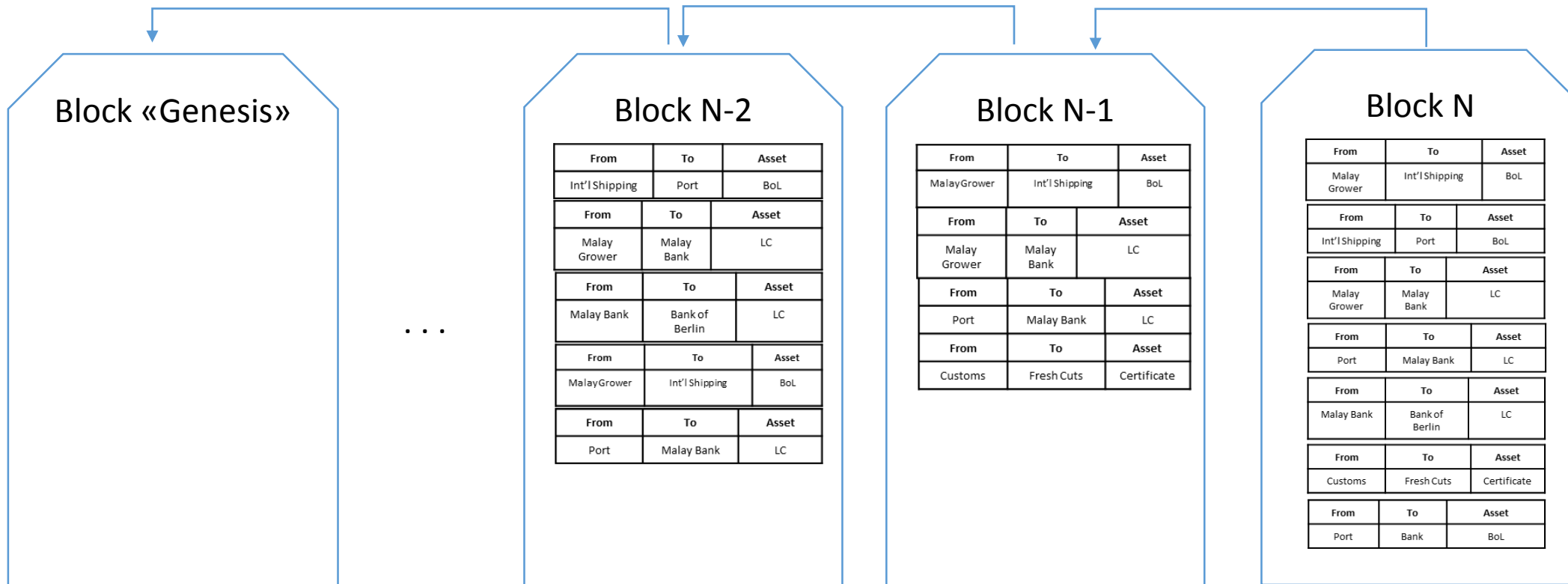
Consensus Generation (2/3)



Consensus (3/3)

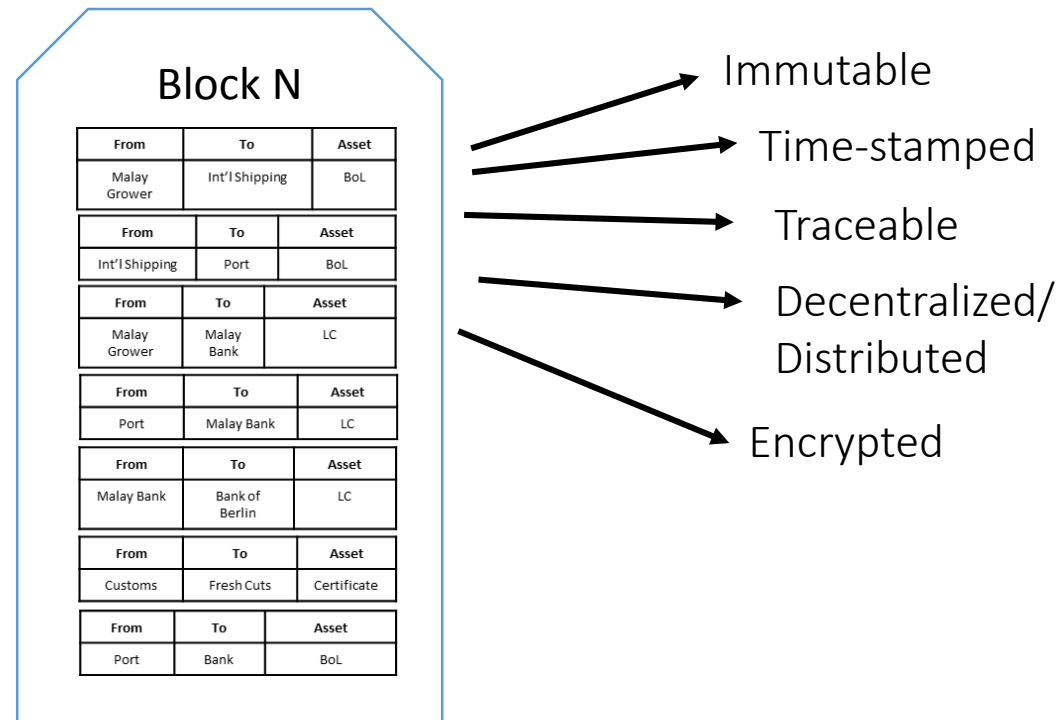


Blockchain = A Chain of Blocks



Recap: Blockchain Features

The content in the block is...



Panel Question #3

Which blockchain feature is **most relevant** to your business sector?

- a. Immutability
- b. Time-stamping
- c. Traceability
- d. Decentralized/ Distributed
- e. Encryption

Panel Question #3a

Which blockchain feature is the **second** most relevant to your business sector?

- a. Immutability
- b. Time-stamping
- c. Traceability
- d. Decentralized/ Distributed
- e. Encryption

Malay Bank



Malay Grower



Port Kelang



Port of Hamburg



Berlin Customs



+ \$21,000.00

Berlin's Fresh Cuts



Logged on as
Berlin Bank



International Shipping

Encrypted: not all transactions are visible to all. Need key to access.

BLOCKCHAIN SHARED LEDGER

Letter of Credit

Phytosanitary Certificate

Bill of Lading

Letter of Credit Created

Letter of Credit Received

Port Kelang - B/L Endorsed

Port Kelang - B/L Endorsed

Port of Hamburg - B/L Endorsed

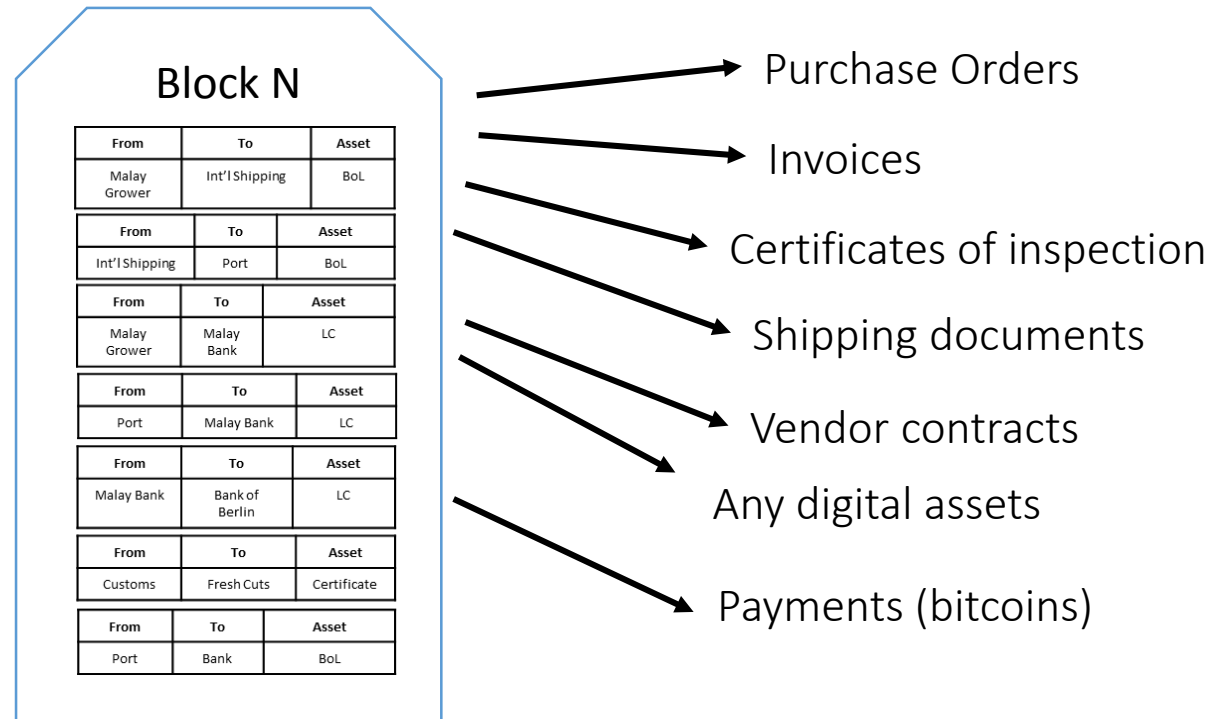
Goods Inspected by Berlin Customs

Customs Fee Transferred

Balance Transferred

Recap: Blockchain Features

Transactions can be of...



Malay Bank



Malay Grower



Port Kelang



Port of Hamburg



Berlin Customs



+ \$21,000.00

Berlin's Fresh Cuts

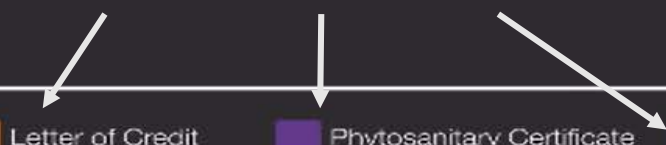


Logged on as
Berlin Bank



International Shipping

Transactions = digital assets



BLOCKCHAIN SHARED LEDGER

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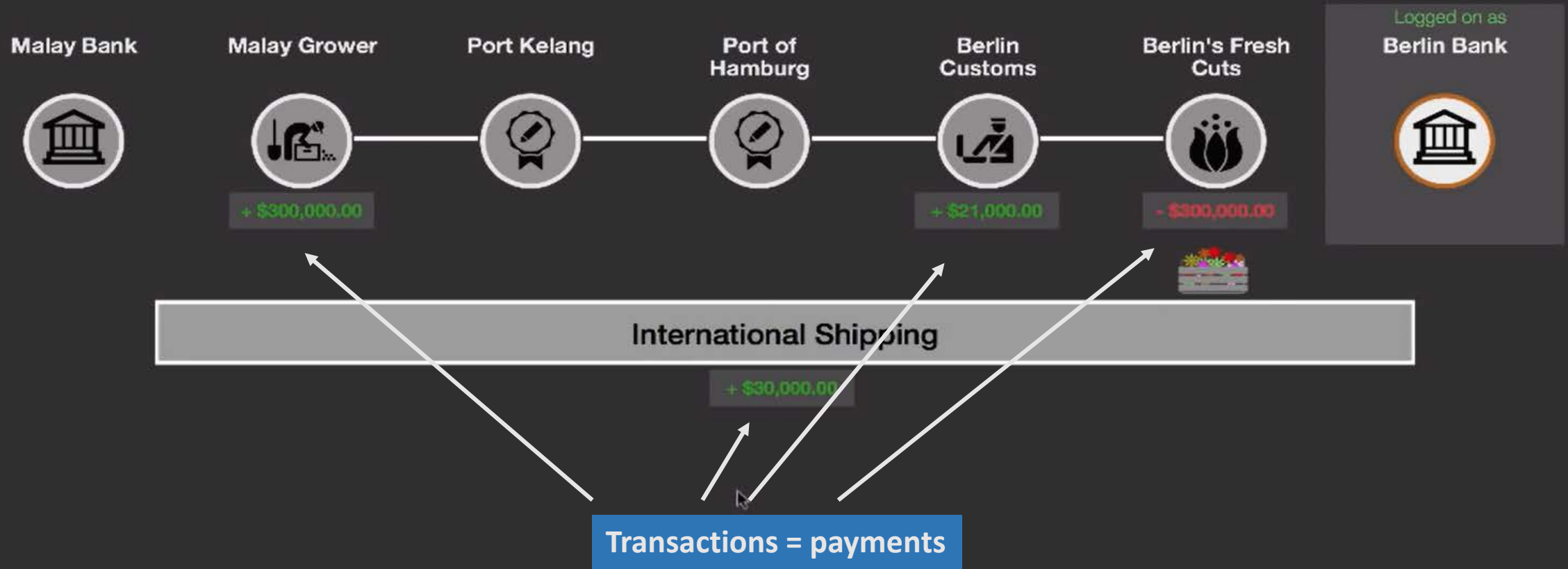
Port Kelang - B/L Endorsed

Port of Hamburg - B/L Endorsed

Goods Inspected by Berlin Customs

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Panel Question #4 (and last)

Which supply chain processes you think could most benefit from blockchain-based applications?

	Supply Chain processes
A	Manage Supplier Contracts
B	Monitor Quality of Product Delivered
C	Receive, Inspect, and Store Inbound Deliveries
D	Maintain Production Records and Manage Lot Traceability
E	Track Carrier Delivery Performance